# Appendix 7

# **NARRATIVE DESCRIPTION** PROCESS FLOW **DIAGRAM** PLOT PLAN **MAP DUST CONTROL PLAN**

### SOURCES AND EMISSIONS RATES

#### **Emissions Summary**

Appendix 5 of this document contains detailed calculations for the uncontrolled and controlled emissions from all sources in the proposed White Pine Energy Station. The aggregate controlled emissions for the Facility are summarized in Table 7.1.

**Table 7.1 – Aggregate Facility Emissions** 

Pollutant	Emission Rate (tons per year)		
Carbon monoxide	10,287		
Nitrogen oxides	4,812		
Sulfur dioxide	6,071		
PM/PM <sub>10</sub>	2,704/2,687		
Volatile Organic Carbons (for Ozone)	248		
Lead	0.79		
Mercury	0.15		
Fluorides (as HF)	46.0		
Sulfuric acid mist	233		
Hydrogen sulfide (H <sub>2</sub> S)	0		
Total reduced sulfur (inc. H <sub>2</sub> S)	0		
Reduced sulfur compounds (inc. H <sub>2</sub> S)	0		

A description of each of the sources in the proposed Facility is provided below.

#### Pulverized Coal-Fired Boilers, S01, S02, and S03

The largest emission sources at the Facility will be the supercritical pulverized coal-fired (PC) boilers, designated as S01, S02, and S03. Each PC boiler will generate steam to drive a condensing steam-turbine generator rated at up to 576 MW gross continuous output. The boilers will fire pulverized coal producing maximum uncontrolled SO<sub>2</sub> emissions of no more than 1.2 lb/MMBtu. The maximum heat input to the boilers will be 5,216 MMBtu/hr each. Emissions from each boiler will flow through emissions control equipment and exit from a 22.2 foot diameter flue 600 feet above grade. Ultra low sulfur distillate fuel will be used for boiler startup and flame stabilization up to approximately 25% load. At higher loads, the fuel supply will be only coal. A discussion of plant startup can be found in Section 8.1.10 of Appendix 8.

The emissions control equipment for each boiler will consist of low NO<sub>x</sub> burners, overfire air, and selective catalytic reduction (SCR) for NO<sub>x</sub> control, spray dryer absorber (dry scrubber) for SO<sub>2</sub> control, fabric filter baghouse for particulate matter control, and halogenated activated carbon for mercury control. This set of equipment will also serve to control hazardous air pollutants (HAPs) and acid gases (e.g., H<sub>2</sub>SO<sub>4</sub>, HCl, HF).

Combustion controls will serve to limit CO and VOC emissions.

The Applicant requests a permit that allows for the operation of the PC boilers for 8,760 hours per year at any load up to and including 100% load. The source impact analysis provided in Appendix 8 includes modeling of operation at 100% load for 8,760 hours per year as well as startup and reduced load settings for short-term averaging periods.

#### **Auxiliary Boiler, S05**

The Facility will include an auxiliary boiler to be used during startup of the PC boilers and during periods when a PC boiler is off line. Operation of the auxiliary boiler will be limited to 500 hours per year, its fuel source limited to ultra low sulfur distillate fuel, and its maximum heat input limited to 367 MMBtu/hr. The auxiliary boiler will have low  $NO_x$  burners, flue gas recirculation, and combustion control optimization to limit emissions from its 225-foot stack.

#### Railcar Unloading Station, S06

Railcars will be brought into a partially enclosed railcar unloading structure. The railcars will be connected with a rotary coupling so they can be tipped to dump the coal. The coal will be dumped into an underground hopper. From the underground hopper, the coal will be transferred to the short conveyor by drop operation. From the short conveyor, the coal will be transferred to stackout conveyor #1. A dust suppression spray will be used to control dust emissions from the railcar unloader. The dust suppression spray will also reduce emissions throughout the downstream conveying process. A maximum of 8,359,116 tons per year of coal will be unloaded at a maximum rate of 4,000 tons per hour.

# **Emergency Coal Pile, S07**

The Emergency Coal Pile and reclaim will be in use during maintenance or repair of the Active Pile Reclaim. During those times, the Emergency Coal Pile will have an approximate exposed surface area of 0.70 acres assuming a cone shaped pile with an approximate base diameter of 173 feet and height of 65 feet. Fugitive dust emissions will be controlled by dust suppression water sprays.

# **Emergency Pile Reclaim, S08**

Coal will be transferred from the Emergency Coal Pile to the emergency conveyor via a drop operation under the Emergency Coal Pile. The emergency conveyor will transport the coal to the Transfer House. The drop onto the emergency conveyor will take place in an enclosed area under the Emergency Coal Pile. The Emergency Pile Reclaim will be enclosed and all emissions will exhaust through a fabric filter. A maximum of 8,359,116 tons per year of coal will be transferred at a maximum rate of 2,000 tons per hour.

# Stackout Transfer Point #2, S10

The coal will be dropped from stackout conveyor #2 onto Active Pile #1 or Active Pile #2 via a stackout tube or radial stacking tube at Stackout Transfer Point #2. A maximum of 8,359,116 tons per year of coal will be

transferred at a maximum rate of 4,000 tons per hour.

#### Active Pile #1, S11

Active Pile #1 will approximate the shape of a cone with an approximate base diameter of 244 feet and height of 92 feet. Fugitive dust emissions will be controlled by dust suppression water sprays.

#### Active Pile #2, S12

Active Pile #2 will approximate the shape of a cone with an approximate base diameter of 244 feet and height of 92 feet. Fugitive dust emissions will be controlled by dust suppression water sprays.

#### Active Pile Reclaim, S13

Coal will be transferred from the Active Piles to the active pile conveyor via a drop operation under the Active Piles. From the active pile conveyor, the coal will be dropped onto reclaim conveyor #1. The drop onto the active pile conveyor, the active pile conveyor, and the drop onto reclaim conveyor #1 will take place in an enclosed area under the Active Piles. Emissions from Active Pile Reclaim will exhaust through a fabric filter. A maximum of 8,359,116 tons per year of coal will be transferred at a maximum rate of 4,000 tons per hour.

## **Transfer Tower, S15**

The Transfer Tower will receive coal from stackout conveyor #1 (from Railcar Unloading), reclaim conveyor #1 (from Active Piles), and emergency conveyor (from Emergency Coal Pile) for transfer onto stackout conveyor #2 (for transfer to the Active Piles) and reclaim conveyor #2 (for transfer to the Tripper Deck). The Transfer Tower may also contain a crusher for crushing any large pieces of coal. The Transfer Tower will be enclosed and emissions from all transfers will exhaust through a fabric filter. A maximum of 16,718,232 tons per year of coal will be transferred at a maximum rate of 10,000 tons per hour.

# Tripper Deck, S17

The Tripper Deck conveyor will receive coal from reclaim conveyor #2 and transport it to the storage silos. The Tripper Deck conveyor, silos and two transfer points will be enclosed and the enclosure will exhaust through a fabric filter. A maximum of 8,359,116 tons per year of coal will be conveyed and transferred at a maximum rate of 4,000 tons per hour.

# **Inactive Pile, S18**

The Inactive Pile will be approximately rectangular in shape. The approximate dimensions of the pile will be 1,685 feet by 1,035 feet at the base with a height of 30 feet and a side slope of 2:1. Approximately 4.3 percent of the pile may be disturbed once a week. To account for this, approximately 4.3% of the pile surface area is assumed to be affected by pile maintenance and is calculated as an active stockpile. The remaining

95.7%, the Inactive Portion, is assumed to be affected by wind erosion and is calculated as industrial wind erosion. Loading onto the pile is included in the active stockpile emission factor. Fugitive dust emissions will be controlled by dust suppression spray water plus surface crusting agents as necessary.

#### **Bottom Ash Transfer Point #1, S20**

The term "bottom ash" is used to refer collectively to the boiler bottom ash and pyrite rejects. This waste stream is modeled as a separate waste stream for disposal in the On-Site Disposal Facility.

Bottom ash from the boiler is collected by a submerged chain conveyor, and dropped on to the bottom ash conveyor at Bottom Ash Transfer Point #1. The Facility may have a grinder for reducing the size of any large pieces of bottom ash, otherwise the bottom ash will be dropped from the submerged chain conveyors onto the bottom ash conveyor for transport to the Bottom Ash Bunker. If a grinder is used, a building will be used to enclose the grinder and two transfer points. Since AP-42 Section 11.24 lists emissions from wet grinding as negligible, the grinding operation and two enclosed transfer points are not calculated. Instead, emissions are conservatively calculated for the single exposed transfer point. The bottom ash will have a high surface moisture content thereby minimizing fugitive emissions. A maximum of 94,610 tons per year of bottom ash will be transferred at a maximum rate of 40 tons per hour.

#### **Bottom Ash Bunker, S22**

Bottom ash will be dropped from the bottom ash conveyor into the Bottom Ash Bunker. The Bottom Ash Bunker will be partially enclosed. A maximum of 94,610 tons per year of bottom ash will be loaded into the Bottom Ash Bunker at a maximum rate of 40 tons per hour.

## **Bottom Ash Transfer Point #2, S23**

The bottom ash will be loaded from the Bottom Ash Bunker into bottom ash trucks for transport to the On-Site Disposal Facility. The bottom ash will have a high surface moisture content thereby minimizing fugitive emissions. A maximum of 94,610 tons per year of bottom ash will be loaded at a maximum rate of 150 tons per hour.

# **Bottom Ash Transfer Point #3, S25**

The bottom ash will be dropped from the bottom ash trucks into the On-Site Disposal Facility. The bottom ash will have a high surface moisture content thereby minimizing fugitive emissions. A maximum of 94,610 tons per year of bottom ash will be transferred at a maximum rate of 150 tons per hour.

# Fly Ash Silo, S26

The term "fly ash" is used to refer collectively to the ash removed from the economizer and air heater hoppers and the fly ash and scrubber waste from the fabric filter. The fly ash may be transported off-site via rail and/or truck or may be disposed of on-site. If disposed of on-site, there will be more transfer points and more possibility of particulate matter emissions. To be conservative, emissions related to on-site disposal are

calculated. For on-site disposal, the fly ash will be mixed with water prior to disposal. The mixing station may be located near the power island, or next to the On-Site Disposal Facility. Location next to the power island will have higher emissions so for design purposes, it is located next to the power island.

The fly ash will be transferred pneumatically from the boiler economizer and air heater hoppers and from the boiler baghouse to one or more Fly Ash Silo(s). The transfer of portions of the fly ash to multiple silos is modeled as one transfer of all fly ash to one silo. From the Fly Ash Silo(s), the fly ash will be pneumatically transferred to either the loading facility or a mixing chamber. Each silo vent will exhaust through a vent filter. A maximum of 576,951 tons per year of fly ash will be transferred at a maximum rate of 200 tons per hour

## Fly Ash Mixing Station, S27

A pneumatic conveyor will transport the fly ash from the Fly Ash Silo(s) into a mixing station next to the boiler fabric filter. In the mixing station, the fly ash will be mixed with approximately 30% water to create a wet dough-like product. The mixing station will exhaust through a fabric filter. A maximum of 576,951 tons per year of dry fly ash will be transferred at a maximum rate of 200 tons per hour.

#### Fly Ash Transfer Point #1, S28

Fly ash will be dropped from the Fly Ash Mixing Station into fly ash trucks for transport to the On-Site Disposal Facility. The fly ash will be in a wet, dough-like form thereby minimizing fugitive emissions. A maximum of 822,567 tons per year of wetted fly ash will be transferred at a maximum rate of 285 tons per hour.

#### Fly Ash Transfer Point #2, S30

Fly ash will be transferred from the fly ash trucks to the On-Site Disposal Facility by drop operation. The fly ash will be in a wet, dough-like form thereby minimizing fugitive emissions. A maximum of 822,567 tons per year of wetted fly ash will be transferred at a maximum rate of 285 tons per hour.

# On-Site Disposal Facility, S32

The wet dough-like fly ash mixture and bottom ash will be deposited into the On-Site Disposal Facility for permanent disposal. The fly ash mixture will solidify to a concrete-like substance within several hours thereby greatly reducing the potential for fugitive emissions. The On-Site Disposal Facility will consist of Earth Moving activities and Wind Erosion. Wind Erosion will occur on the piles of cover material, top soil and the working cell of the disposal facility and is estimated at 10 acres. Once disposal in a cell has been completed, the area will be reclaimed to natural vegetation. Wet material, water sprays, and surface crusting agents will be used to control fugitive emissions.

# Carbon Silo, S33

Halogenated Activated Carbon will be delivered to the Facility in pneumatic trucks. Trucks will blow the

carbon into the Carbon Silo. From the Carbon Silo, the carbon will be pumped to the injection grid in the flue gas stream. The Carbon Silo will exhaust through a vent filter. A maximum of 2,976 tons per year of carbon will be transferred at a maximum rate of 1,000 tons per hour.

#### Lime Railcar Unloading Station, S35

Lime will be delivered to the Facility in pneumatic trucks or railcars. If delivered by railcar, there will be more transfer points and more possibility of particulate matter emissions. To be conservative, railcar delivery is modeled

Railcars will be brought into a partially enclosed railcar unloading structure. The railcars will have doors on the bottom which will open to dump the lime, or the cars will be connected with a rotary coupling so they can be tipped to dump the lime. The lime will be dumped into an underground hopper. From the underground hopper the lime will be transferred to a short conveyor and then onto the lime conveyor. The drop from the hopper, the short conveyor and two transfer points will all occur in an enclosed area under the Lime Railcar Unloading Station. Emissions from the enclosed area will vent through a fabric filter. A maximum of 100,114 tons per year of lime will be unloaded at a maximum rate of 1,000 tons per hour.

#### Lime Silo, S37

Lime will be transferred from the lime conveyor to the Lime Silo. From the Lime Silo, the lime will be gravity fed to a mixing station. At the enclosed mixing station, a slurry will be created. The Lime Silo will exhaust through a vent filter. A maximum of 100,114 tons per year of lime will be transferred at a maximum rate of 1,000 tons per hour.

## **Unpaved Roadway Travel, S38**

The Facility will have unpaved roads within the On-Site Disposal Facility. Ash trucks will travel inside the On-Site Disposal Facility each day. A maintenance truck will travel the route approximately three times per day. Daily road travel is estimated according to the maximum expected trips per day. The unpaved roads will be covered with gravel and/or chemical suppressant.

# Paved Roadway Travel, S39

All roads at the Facility other than on the interior of the On-Site Disposal Area will be paved. Daily road travel is estimated according to the maximum expected trips per day. Fugitive emissions will be controlled by water sprays and/or sweeping.

# **Emergency Diesel Engine Driven Generator, S44**

An emergency diesel engine driven generator, rated at 1,500 kW, will be installed at the Facility to provide electric power for safe plant shutdown and critical load operation in the event of loss of the electrical grid.

### **Emergency Diesel Engine Driven Firewater Pump, S45**

The Facility will have an Emergency Diesel Engine Driven Firewater Pump rated at 450 hp. Operation of the diesel firewater pump will be limited to weekly testing and emergency use.

## 330,000 Gallon Distillate Fuel Storage Tank (Above Ground), S46

The Facility will have a 330,000-gallon vertical fixed roof storage tank for low sulfur distillate fuel for use in the auxiliary boiler and the PC boiler during startup. The tank will be equipped with conservation vent valves. A maximum of 12 turnovers per year is expected for the distillate fuel storage tank.

The fuel storage tank will be bermed to contain approximately 125% of the contents of the tank. The berm will be impervious to water and oil. Spill prevention control and countermeasures will be covered in the Facility's SPCC Plan that will be prepared in accordance with 40 CFR 112.

## 20,000 Gallon Diesel Fuel Storage Tank (Above Ground), S47

The Facility will have a 20,000-gallon diesel fuel vertical fixed roof storage tank for use in plant vehicles. A fuel dispensing station will be located adjacent to the storage tank. The tank will be equipped with conservation vent valves. A maximum of 26 turnovers per year is expected for the diesel fuel storage tank.

# 2,000 Gallon Emergency Generator Diesel Fuel Storage Tank (Above Ground), S48

The Facility will have a 2,000-gallon diesel fuel horizontal storage tank for use in the Emergency Diesel Engine Driven Generator. The tank will be equipped with conservation vent valves. A maximum of 25 turnovers per year is expected for the tank.

# 500 Gallon Emergency Firewater Pump Diesel Fuel Storage Tank (Above Ground), S49

The Facility will have a 500-gallon diesel fuel horizontal storage tank for use in the Emergency Diesel Engine Driven Firewater Pump. The tank will be equipped with conservation vent valves. A maximum of 5 turnovers per year is expected for the tank.

# 500 Gallon Unleaded Gasoline Storage Tank (Above Ground), S50

The Facility may have a 500-gallon unleaded gasoline horizontal storage tank for use in the Facility maintenance and administrative vehicles. The tank will be equipped with conservation vent valves. A maximum of 9 turnovers per year is expected for the tank.

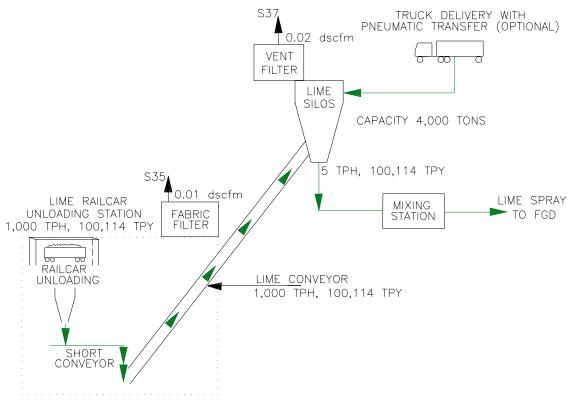
FLUE GAS RECIRCULATION STACK AUXILIARY STEAM SYSTEM DISTILLATE FUEL OIL S01/S02/S03 LIME SPRAY FROM LIME SYSTEMS HALOGENATED
ACTIVATED CARBON SILO
CAPACITY 140 TONS
LOADING – 1,000 TPH, 2,976 TPY
UNLOADING – 0.5 TPH, 2,976 TPY 330,000 GALLON FUEL OIL TANK FABRIC FILTER PNEUMATIC FLY ASH SYSTEM DRY FGD AR. SCR VAPORIZER ECONOMIZER-BOILER 5,216 MMBtu/hr AMMONIA STORAGE TANKS ONDENSER STEAM TURBINE LEGEND: 1, SXX DENOTES EMISSION POINT NUMBER 530 MW NET/UNIT 🔗 — AUXILIARY STEAM SYSTEM Z,000 GALLON DIESEL TANK

Figure 7.1 – Boiler Emission Control Flow Chart

SURFACE CRUSTING AGENTS WATER SPRAYS EMERGENCY PILE RECLAIM 0.70 ACRES ACTIVE PORTION 1,8 ACRE 0,01 dscfm WATER SPRAYS ARTIVE S12 ACTIVE PILE CONVEYOR 4,000 TPH, 8,359,116 TPY ACTIVE PILE RECLAIM S13 STACKOUT TRANSFER POINT #2, S10 STACKOUT TUBE EMERGENCY CONVEYOR 2,000 TPH, 8,359,116 TPY RECLAIM CONVEYOR #1 4,000 TPH, 8,359,116 TPY CDAL TRANSFER & CONVEYING TO BOILERS 1,000 TPH, 8,359,116 TPY 0,01 dscfm FABRIC FILTER CAPACITY 10,000 TONS TRIPPER DECK CRUSHER, 0.01 dscfm FABRIC FILTER WATER SPRAYS PARTIAL ENCLOSURE TRANSFER TOWER 10,000 TPH, 16,718,232 TPYL RECLAIM CONVEYOR #2 4,000 TPH, 8,359,116 TPY SXX DENOTES EMISSIONS SOURCE NUMBER ACREAGE VALUES REFER TO SURFACE ACRES RAILCAR UNLDADING STATION, SO6 4,000 TPH, 8,359,116 TPY PARTIAL ENCLOSURE (UNDERGROUND) SHORT CONVEYOR

Figure 7.2 – Coal Handling Flow Chart

Figure 7.3 – Lime Handling Flow Chart



LEGEND:

1. SXX DENOTES EMISSION POINT NUMBER

Figure 7.4 – Ash Handling Flow Chart

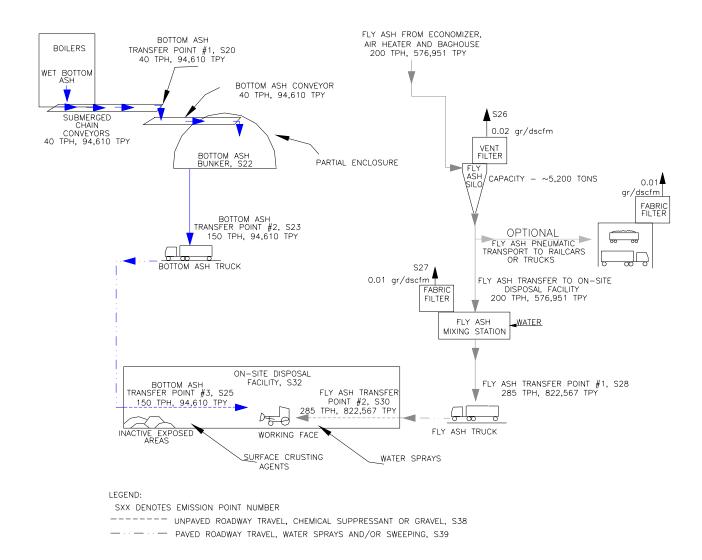


Figure 7.5 Plot Plan

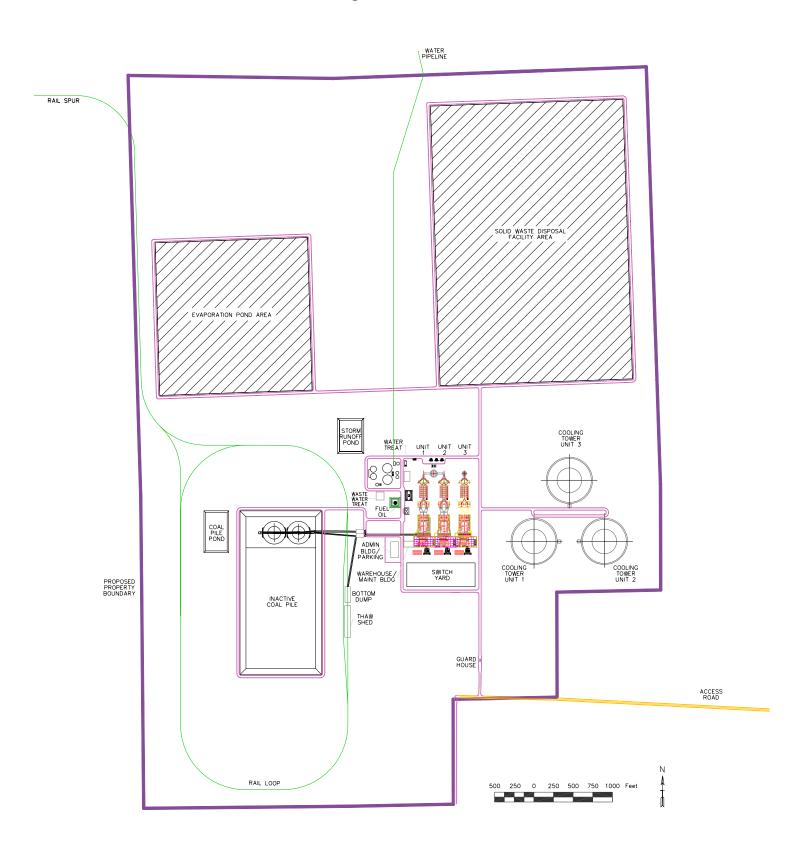
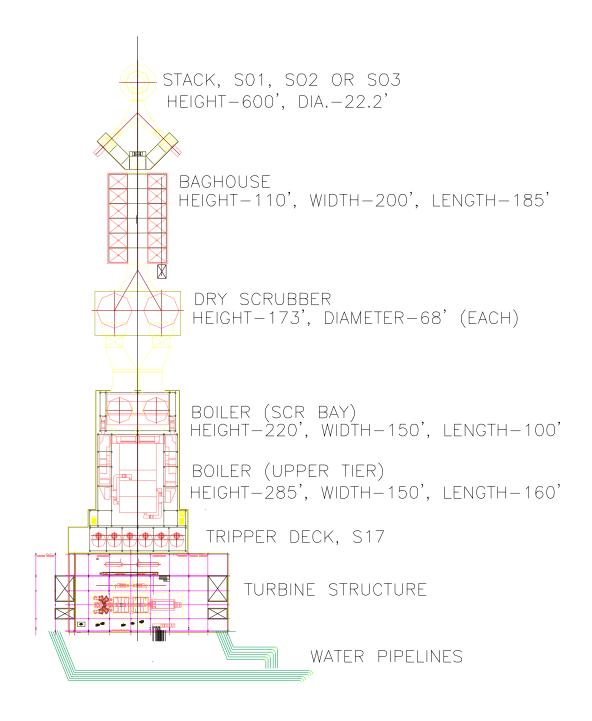
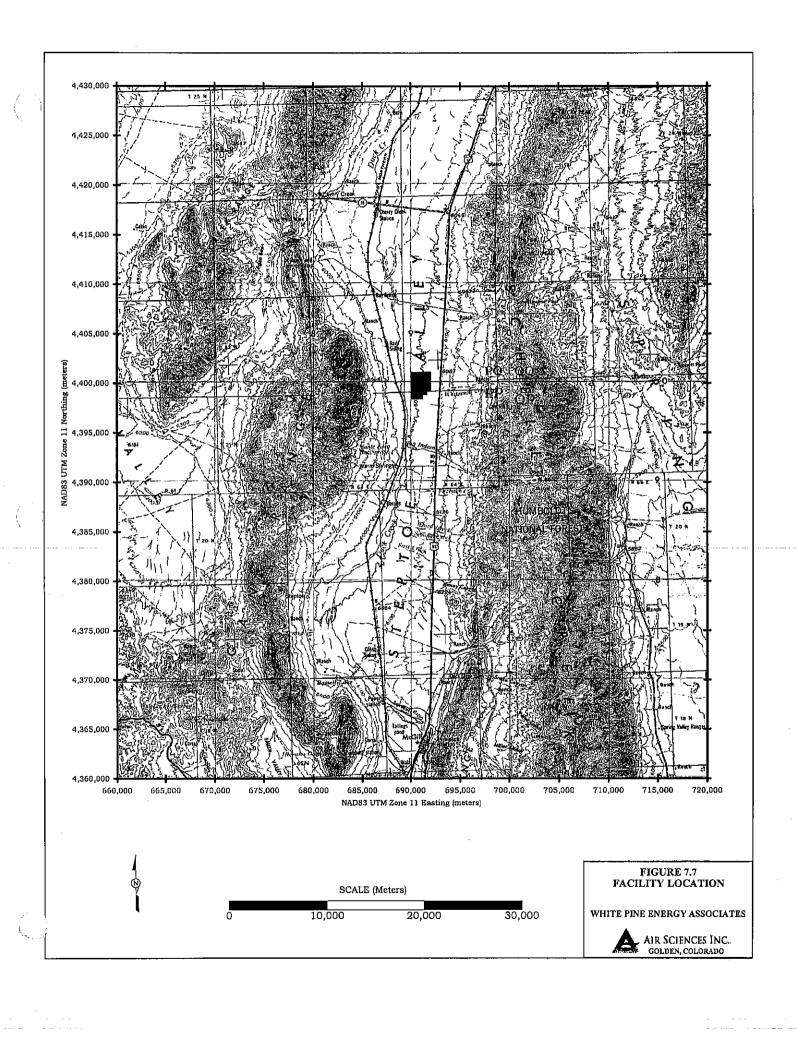


Figure 7.6 – Power Island Closeup





Surface disturbance will include all land within the project site boundary. Surface disturbances associated with the transmission line and other applicable off-site infrastructure improvements will be evaluated as part of a separate dust control permit.

The Property Boundary shown above will also be the fenceline for the Facility.

# SURFACE AREA DISTURBANCE PERMIT FUGITIVE DUST CONTROL PLAN

I. COMPANY INFORMATION						
COMPANY NAME:	White Pine Energy Associates, LLC	PERMIT NUMBER: AP				
BUSINESS ADDRESS:	Two Tower Center, 11 <sup>th</sup> Fl.	East Brunswick	Middlesex			
	(STREET)	(CITY/TOWN)	(STATE)	(COUNTY)		
MAILING ADDRESS:	Two Tower Center, 11th Fl.	East Brunswick	New Jersey 08816			
	(STREET/P.O BOX)	(CITY/TOWN)	(STATE)	(ZIP CODE)		
PHONE NUMBER:	732-249-6750	FAX NUMBER:	732-249-7290			

II. RESPONSIBLE OFFICIAL (R.O.)						
R.O. NAME	Michael P. Witzing		TITLE	<b>Executive Vice President</b>		
BUSINESS ADDRESS:	Two Tower Center, 11 <sup>th</sup> Fl.	East B	runswick	New Jersey	Middlesex	
	(STREET)	(CITY/TOWN)		(STATE)	(COUNTY)	
MAILING ADDRESS:	Two Tower Center, 11th Fl.	East Brunswick		New Jersey	08816	
	(STREET/P.O BOX)	(CITY	Y/TOWN)	(STATE)	(ZIP CODE)	
PHONE NUMBER:	732-249-6750	FAX NUMBER: 732-249-729		9-7290		

III. PHYSICAL PLANT									
PROJECT ADDRESS:		TBD		TBD		Nevada		White Pine	
		(STREET)			(CITY/TOWN)		(STATE	E)	(COUNTY)
MAILING ADDRESS:		TBD		TBD		Nevada		TBD	
		(STRE	ET/P.O BOX)		(CITY/	//TOWN) (STATE		E)	(ZIP CODE)
PHONE NU	PHONE NUMBER:		TBD	FAX NUMBER:		MBER:		TBD	
MAJOR X- S	IAJOR X- STREETS: None available								
SECTION:	W ½ Section	√2 Section 31 √2 Section 32 E 1/2 Section 32  TOWNSHIP:		22 North		RANGE: 64		64 East	
SECTION:	NE ¼ Section 6 N ½ SE ¼ Section 6 NW ¼ Section 5 NW ¼ NE ¼ Section 5 NW ¼ SW ¼ Section 5		TOWNSH	SHIP: 21 Noi		rth	RANGE:		64 East
UTM: 690,064 meters E, 4,398,335 meters N, UTM zone 11, NAD 83									
PROJECT M	PROJECT MAPS:						X		
(MARK TYPE C	(MARK TYPE OF MAP ATTACHED)		(TRACT) (		(SITE)	SITE) (TOPOGRAPH		(OTHER - )	

# SURFACE AREA DISTURBANCE PERMIT FUGITIVE DUST CONTROL PLAN

IV. AC	CKNOWLEGEMENT OF ENVIRONMENTAL CONTROL REQUIREMENTS BY R.O.						
	ichael P. Witzing_, the Responsible Official for <u>White Pine Energy Associates, LLC</u> , have: (R.O. Name) (Company Name) (1) ad understand the provisions of Nevada Administrative Code (NAC) Section 445B.22037						
"Emiss	"Emissions of Particulate Matter: Fugitive Dust" which requires that we prevent controllable fugitive dust						
	to become airborne on a 7-day/24-hour /day basis at our Project's site.						
Signed	Signed         DateDecember 20, 2005						
	(R.O. Signature)						
V. PROJECT OPERATIONS							
	ription of Project Operations:						
_ <u>Please</u>	see project overview description in the Introduction to this permit application.						
VI. F	UGITIVE DUST CONTROL - BEST PRACTICAL METHODS						
used for	ractical Methods for controlling fugitive dust (Project Site): The best practical methods (BPMs) to be r controlling fugitive dust generated at this Project's disturbed areas are as follows. This is not an all re list, other BPMs may also be appropriate for this section (check appropriate BPMs):						
X	Use of water trucks to spray water on disturbed areas on a regular basis (during construction)						
	Pre-watering of areas to be disturbed (including all unpaved onsite roads and staging areas)						
X	Graveling of roadways, storage areas and staging areas						
	Posting and limiting vehicle speeds to 10-15 miles per hour						
	Use of wind fences to reduce wind impacts						
	Cessation of all operations when winds make fugitive dust control difficult						
$\boxtimes$	Fencing or berming to prevent unauthorized access to disturbed areas.						
	Application of water sprays on material storage piles on a regular basis						
	Covering material storage piles with tarpaulin or geo-textiles; tenting						
	Use of overhead water spray rack or water hoses to water down uncovered trucks transporting processed materials prior to leaving Project boundaries.						
×	Subcontractors: Any and all subcontractors (including truck drivers) informed of their responsibilities for the control of fugitive dust while they are on the project site (including haul roads to and from the site). In addition, they will be advised of the best practical methods for controlling their fugitive dust as well as keeping off adjacent areas not covered by the project's permit.						
	Training of construction equipment operators to recognize fugitive dust generation and having the authority to shut down operations until water truck arrives and sprays water on the disturbed areas						

#### SURFACE AREA DISTURBANCE PERMIT FUGITIVE DUST CONTROL PLAN

- Equipment Operator and/or Responsible Official has read and understands the requirements in the Project's Surface Area Disturbance Permit and Plan
- ☑ Other Applicable BPM: <u>Use of water trucks during surface disturbing construction activities that cause</u> fugitive dust.
- ☑ Other Applicable BPM: <u>Application of chemical dust suppressants and/or surfactants on unpaved haul roads.</u>

#### VII. PROJECT FUGITIVE DUST/EMISSIONS RESOURCES INFORMATION

**Water Trucks:** Water trucks may be owned or rented. In the event that one or more water truck(s) necessary for control of fugitive dust (owned, rented or leased) becomes inoperable, additional water truck(s) will be rented or leased for until such time the water truck(s) are operable. Operable water truck (s) must be available on 7-day/week, 24-hour/day basis.

#### **Number of Water Trucks:**

Water Truck # 1	TBD	Capacity Gallons:	TBD
Water Truck # 2		Capacity Gallons:	
Water Truck # 3		<b>Capacity Gallons:</b>	

Location of water supply for control of fugitive dust: Groundwater

Water Truck and Construction Equipment Operational Log: the daily operations log book for recording the operation of the water truck and construction equipment is maintained on the Project site. The log contains the following information:

- Hours of operation for each water truck and construction equipment (front loader, scraper, etc.) used onsite.
- The daily quantity of water used for fugitive dust control purposes.
- Starting and ending times for the workday.
- Record of water truck (including rental water truck) and construction equipment maintenance, malfunctions and repairs

#### VIII. NOTIFICATION

**Excess Emissions:** The following training requirements are recommended as an aid in maintaining compliance with permit terms and conditions and are not mandatory. It is recommended that the R.O. and/or selected equipment operators be given USEPA Method 9 visual emission training (or equivalent, as determined by NDEP) to recognize when the facility's permit's opacity limits are being exceeded and procedures to follow to bring systems back into compliance. It is recommended that all training records be kept with the facility's Process and Emission Control Equipment Operational Log.

#### IX. TRAINING

Training Requirements: The following training requirements are recommended as an aid in maintaining compliance with permit terms and conditions and are not mandatory. It is recommended that the R.O. and/or selected equipment operators be given USEPA Method 9 visual emission training (or equivalent, as determined by NDEP) to recognize when the facility's permit's opacity limits are being exceeded and procedures to follow to bring systems back into compliance. It is recommended that all training records be kept with the facility's Process and Emission Control Equipment Operational Log.

#### SURFACE AREA DISTURBANCE PERMIT FUGITIVE DUST CONTROL PLAN

#### X. PLAN REVISION

**Plan Revision Requirements:** In the event there are changes in the operation of the Project, modifications made to the Project's Air Quality Operating Permit or changes to the Nevada Administrative Code affecting this plan, the plan shall be revised to reflect those changes and modifications and resubmitted to the Nevada Division of Environmental Protection for review and evaluation.

Plan Date: December 20, 2005